Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A method for assessing aspirin resistance in a patient, said method comprising determining the concentration of a metabolite of thromboxane A2 in a sample of body fluid from the patient; comparing the concentration of the metabolite in the sample to a predetermined set of concentration quartiles comprising a first quartile, a second quartile, a third quartile and a fourth quartile; and determining within which quartile the sample concentration falls; wherein a concentration of the metabolite within the second, third or fourth quartile is indicative of aspirin resistance and resistance increases with each increasing quartile.

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) A method for assessing relative risk of a cardiovascular event in a patient taking aspirin, said method comprising obtaining a sample of a biological fluid from the patient; [[and]] determining the concentration of a thromboxane A2 metabolite in the sample ~~wherein an increased concentration of the thromboxane A2 metabolite correlates with an increased risk of a cardiovascular event~~; comparing the concentration of the metabolite to a predetermined set of concentration quartiles comprising a first quartile, a second quartile, a third quartile and a fourth quartile; and determining within which quartile the sample concentration falls; wherein the relative risk is increased for a concentration in the second, third or fourth quartile relative to a concentration in the first quartile.

5. (Original) The method of claim 4, wherein said patient has arterial vascular disease.

6. (Currently amended) The method of claim 4, wherein the concentration of the metabolite is determined using an immunoassay.

7. (Currently amended) The method of claim [[5]]6, wherein the immunoassay is an ELISA, an RIA or a fluoroimmunoassay.

8. (Original) The method of claim 4, wherein the biological fluid is urine.

9. (Currently amended) The method of claim 4, wherein the thromboxane A2 metabolite is 11-~~dihydro~~ dehydro thromboxane B2.

10-13. (Cancelled)

14. (Currently amended) The method of claim [[8]]9, wherein the method is performed by comparing the concentration of 11-~~dihydro~~ dehydro thromboxane B2 in the sample to a predetermined set of concentration quartiles wherein a concentration of thromboxane B2 at less than 15.1 ng/mmol creatinine corresponds to a first quartile value, a concentration of thromboxane B2 at 15.1 to 21.8 ng/mmol creatinine corresponds to a second quartile value, a concentration of thromboxane B2 at 21.9 to 33.7 ng/mmol creatinine corresponds to a third quartile value, and a concentration of thromboxane B2 at equal to or greater than 33.8 ng/mmol creatinine corresponds to a fourth quartile value; determining which quartile the sample concentration falls within and ~~providing a readout of~~ determining the relative risk based on the quartile ~~determination for~~ value of the sample compared to a first quartile value.

15. (Cancelled)

16. (Currently amended) The method of claim 14, wherein the cardiovascular event is a composite of myocardial infarction, stroke and cardiovascular death and the relative risk ~~of a cardiovascular event is 10% for a concentration within the first quartile, 13% for~~ is 1.3 times for a concentration in the second quartile, ~~15% for~~ 1.4 times for a concentration in the third quartile, and ~~18% for~~ 1.8 times for a concentration in the fourth quartile as compared to that for a concentration in the first quartile.

17. (Cancelled)

18. (New) The method of claim 1, wherein the metabolite is 11-dehydro thromboxane B2.

19 (New) The method of claim 18, wherein the first quartile comprises concentrations less than 15.1 ng/mmol creatinine, the second quartile comprises concentrations between 15.1 ng/mmol creatinine and 21.8 ng/mmol creatinine, the third quartile comprises concentrations between 21.9 ng/mmol creatinine and 33.7 ng/mmol creatinine, and the fourth quartile comprises concentrations greater than 33.8 ng/mmol creatinine.

20. (New) The method of claim 1, wherein aspirin resistance correlates with risk of a cardiovascular event, and relative risk of a cardiovascular event increases with each increasing quartile.

21. (New) A method for determining relative risk of a cardiovascular event, said method comprising determining the concentration of 11-dehydro thromboxane B2 in a urine sample from a patient and determining whether the concentration exceeds 15.1 ng/mmol creatinine, wherein a concentration at greater than 15.1 ng/mmol is indicative of an increased risk relative to a concentration at less than 15.1 ng/mmol creatinine.

22. (New) The method according to claim 21, wherein the cardiovascular event is myocardial infarction and a sample concentration at greater than 33.7 ng/mmol is indicative of a relative risk of 2 times compared to a concentration at less than 15.1 ng/mmol.

23. (New) The method according to claim 21, wherein the cardiovascular event is stroke and a sample concentration at 15.1 to 21.8 ng/mmol creatinine is indicative of a relative risk of 2.5 compared to a concentration at less than 15.1 ng/mmol creatinine.

24 (New) The method according to claim 21, wherein the cardiovascular event is cardiovascular death and a sample concentration at greater than 33.7 ng/mmol creatinine is indicative of a relative risk of 3.5 compared to a concentration less than 15.1 ng/mmol creatinine.